

WHAT IS CLAIMED IS:

1. A method of responding to a client request for information from a service device in a data processing network, comprising:

receiving the information request from the client;

responsive to determining that at least a portion of the requested information is not in a cache of the server device, sending the storage request to a network attached storage device;

responsive to the storage request, and generating a packet containing at least a portion of the requested information; and

sending the generated packet simultaneously to the client and to the server.

2. The method of claim 1, wherein the storage request includes protocol information corresponding to the client-server connection.

3. The method of claim 2, wherein generating the packet includes using the client-server connection information to replicate the client-server protocol stack in the generated packet.

4. The method of claim 3, wherein generating the packet further includes using the IP address of the server as the source address.

5. The method of claim 1, wherein sending the generated packet comprises including a multicast address in the packet.

6. The method of claim 5, wherein the multicast address is incorporated at a data link layer of the packet's protocol stack.

7. The method of claim 5, wherein the generated packet is multicast to the server and to a gateway to which the client is connected via a wide area network.

8. The method of claim 5, wherein the generated packet is multicast to the server and to a client connected to the server via a local area network.

9. The method of claim 1, further comprising updating the server cache with the requested information responsive to the server receiving the generated packet.

10. The method of claim 1, further comprising, responsive to a subsequent client request for the requested data, generating a second storage request if the server failed to receive the generated packet.

11. A data processing network, comprising:

a server device configured to receive information requests from a client connected to the network;

a network attached storage device connected to the server device via a local area network;

server device code for determining if the requested data is available in the server's local cache;

server device code for generating a storage request responsive to determining that the requested data is not locally available;

storage device code for generating a packet containing at least a portion of the requested information responsive to the storage request; and

storage device code for sending the generated packet simultaneously to the client and to the server.

12. The data processing network of claim 11, wherein the storage request includes protocol information corresponding to the client-server connection.

13. The data processing network of claim 12, wherein generating the packet includes using the client-server connection information to replicate the client-server protocol stack in the generated packet.

14. The data processing network of claim 13, wherein generating the packet further includes using the IP address of the server as the source address.

15. The data processing network of claim 11, wherein the code for sending the generated packet comprises including a multicast address in the packet.

16. The data processing network of claim 15, wherein the multicast address is incorporated at a data link layer of the protocol stack.

17. The data processing network of claim 15, wherein the generated packet is multicast to the server and to a gateway to which the client is connected via a wide area network.

18. The data processing network of claim 15, wherein the generated packet is multicast to the server and to a client connected to the server via a local area network.

19. The data processing network of claim 11, further comprising server code for updating the server cache with the requested information responsive to the server receiving the generated packet.

20. The data processing network of claim 11, further comprising server code for generating a second storage request in response to a subsequent client request for the requested data if the server failed to receive the generated packet.

21. A computer program product comprising code means for generating packets responsive to a client request for information, the code means comprising:

code means determining that the requested information is not available in a server cache;

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code means for sending a storage request to a network attached storage device;

code means for retrieving the requested information from a network attached storage device disk and generating a packet containing at least a portion of the requested information; and

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code means for sending the generated packet simultaneously to the client and the server.

22. The computer program product of claim 21, wherein the storage request includes protocol information corresponding to the client-server connection.

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23. The computer program product of claim 22, wherein the code means for generating the packet includes code means for using the client-server connection information to replicate the client-server protocol stack in the generated packet.

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24. The computer program product of claim 23, wherein the code means for sending the generated packet comprises code means for including a multicast address in the packet, wherein the multicast address identifies the client and the server.

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25. The computer program product of claim 21, further comprising code means for updating the server cache with the requested information responsive to the server receiving the generated packet.

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26. The computer program product of claim 21, further comprising code means for generating a second storage request in response to a subsequent client request for the requested data if the server failed to receive the generated packet.